

- 7 -

Claims

1. An implant for use in a surgical procedure, the implant comprising a metal substrate and a surface layer  
5 that is integral with the metal substrate, the layer incorporating a biocidal metal deposited from a solution.
2. An implant as claimed in claim 1 wherein the integral surface layer is generated by growing the layer  
10 from the metal.
3. An implant as claimed in claim 2 wherein the surface layer is generated by an anodising process.
- 15 4. An implant as claimed in claim 3 wherein the surface layer comprises a metal phosphate.
5. An implant as claimed in any one of claims 2 to 4 wherein the biocidal metal comprises metal ions absorbed  
20 within the surface layer.
6. An implant as claimed in claim 5 wherein the biocidal material comprises silver.
- 25 7. An implant as claimed in claim 1 wherein the integral surface layer is generated by first depositing the layer and then subjecting the layer and the substrate to diffusion bonding so that the layer becomes integral with the metal of the substrate.  
30
8. An implant as claimed in any one of the preceding claims wherein the surface of the implant is highly polished before provision of the surface layer.

35

- 8 -

9. A method of making an implant for use in a surgical procedure, the implant comprising a metal substrate, and the method comprising forming a surface layer on the substrate which is integral with the metal substrate, and  
5 incorporating a biocidal metal in the layer by deposition from a solution.

10. A method as claimed in claim 9 comprising anodising the surface of the substrate to form the integral surface  
10 layer.

11. A method as claimed in claim 10 wherein silver ions are incorporated in the surface layer by contact with a solution containing silver ions.

15

12. A method as claimed in claim 9 wherein the surface layer is a metal layer deposited by electroplating, and is subsequently rendered integral with the substrate by a heat treatment to cause diffusion bonding.

20